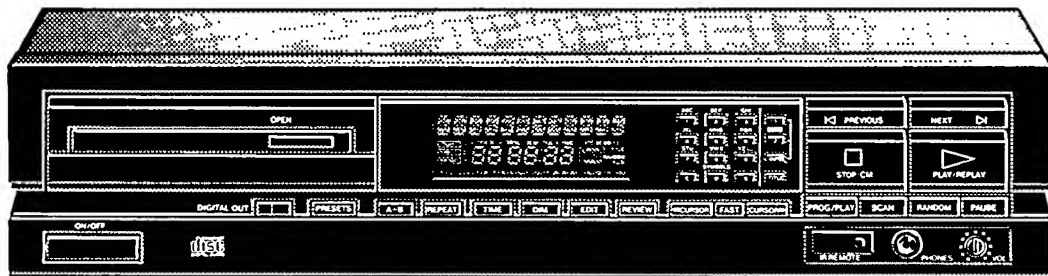# CD 840

Compact Disc Player

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING
TO QUALIFIED SERVICE PERSONNEL

This symbol is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure, that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CONTENTS   Page

The Model and Serial Number of your Compact Disc player will be found on the back of the instrument.
Please record these numbers in the space provided below:
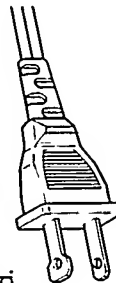
Model Number:

Serial Number:

CAUTION

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

SAFETY INSTRUCTIONS

Read before operating equipment

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.
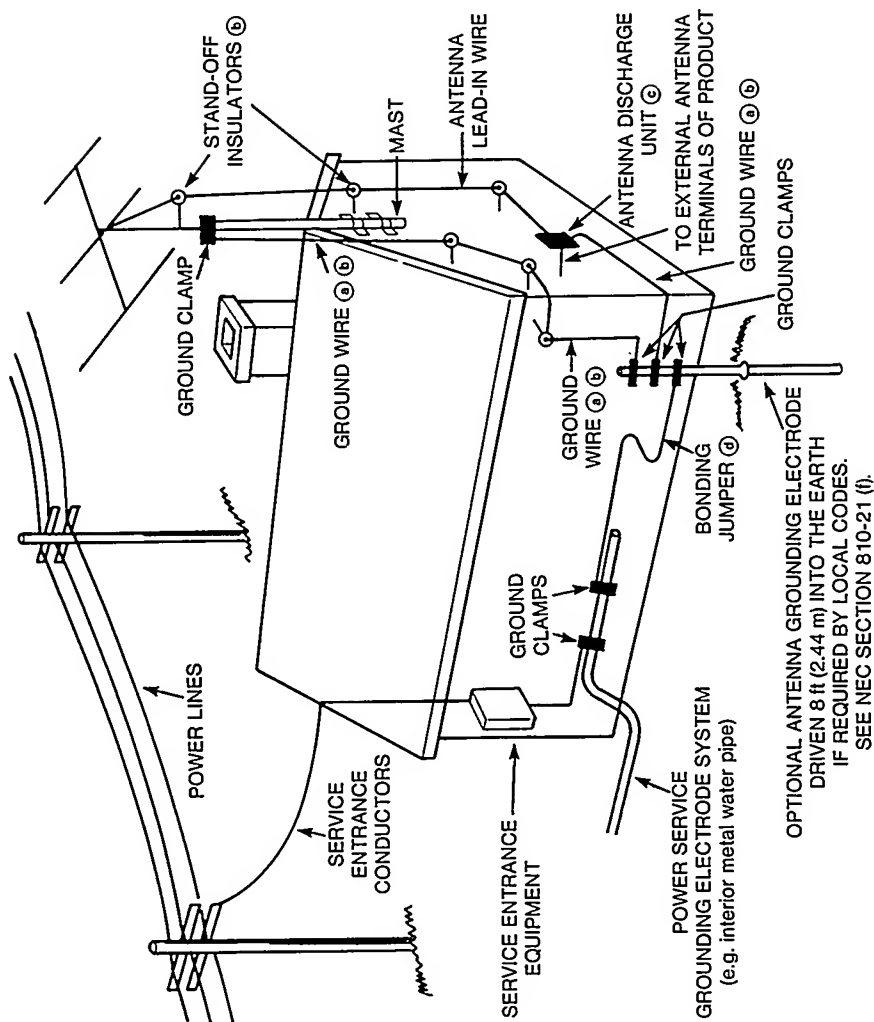
1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.

2. Retain Instructions - The safety and operating instructions should be retained for future reference.

3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.

4. Follow Instructions - All operating and use instructions should be followed.

5. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool, etc.

6. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.

6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.

8. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

9. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

10. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

11. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.

12. Power-Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.

13. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.

14. Power Lines - An outdoor antenna should be located away from power lines.

15. Outdoor Antenna Grounding - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. A

16. Nonuse Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

17. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

18. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:
A. The power-supply cord or the plug has been damaged; or
B. Objects have fallen, or liquid has spilled into the appliance; or
C. The appliance has been exposed to rain; or
D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
E. The appliance has been dropped, or the enclosure damaged.

19. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

AC POLARIZED PLUG

FIG.A

EXAMPLE OF ANTENNA GROUNDING ACCORDING TO THE NATIONAL ELECTRIC CODE INSTRUCTIONS CONTAINED IN ARTICLE 810 - 'RADIO AND TELEVISION EQUIPMENT'

(a) Use No. 10 AWG (5.3 mm²) copper, No. 8 AWG (8.4 mm²) aluminum, No. 17 AWG (1.0 mm²) copper-clad steel or bronze wire, or larger, ground wire.

(b) Secure the antenna lead-in and ground wires to the house with stand-off insulators spaced from 4-6 feet (1.22-1.83 m) apart.

(c) Mount the antenna discharge unit as close as possible to where the lead-in wire enters the house.

(d) Use jumper wire not smaller than No. 6 AWG (13.3 mm²) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21 (J).

NOTE TO THE CATV SYSTEM INSTALLER:

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

1

Operating Instructions

INTRODUCTION

The Compact Disc system is a major step forward in audio technology. By employing the most sophisticated digital and optical technologies, Compact Disc not only produces the ultimate in sound reproduction, it also offers unprecedented ease of operation, with rapid access to every track on the disc and the possibility of programming.

INSTALLATION

CHECKING THE POWER SUPPLY
The type plate on the back of your player indicates the power voltage for which it is set.

Important!
Certain versions of this player are equipped with a voltage selector (f), which enables you to set the player to the correct voltage yourself. When changing the voltage setting from 220/240 V to 110/127 V or vice versa, it is also necessary to change the fuse to one of the correct rating.

Replacing the fuse
- Using a screwdriver, remove the fuse holder (g).
- Remove the old fuse and replace with a fuse of the correct rating (300 mA for 110/127 V; 160 mA for 220/240 V).
- Replace the fuse holder.

REMOVING THE TRANSIT CLAMPS *(Fig. 1-2)*
The two red transit clamps on the bottom of the unit lock the play mechanism to protect it during transportation.
- Turn the player upside down.
- Turn the clamps counter-clockwise and remove them from the player.
- Store them in the recesses provided.

Replace the clamps if you wish to transport the player. To do this, turn the player upside down, insert the clamps in the holes provided and rotate them clockwise until they lock in position.

INSERTING AND REPLACING THE BATTERIES IN THE REMOTE CONTROL *(Fig. 3)*
- Open the battery compartment.
- Insert the two batteries according to the diagram in the compartment.
- Replace the cover.

The life of the batteries is around one year. Remove them when they are exhausted or when you are not intending to use the remote control for some time.
In this way you will prevent damage to the remote control by possible battery leakage.
For replacement only use batteries of the AAA type.

PLACING THE COMPACT DISC PLAYER

Free-standing
- Always position the player horizontally on a flat, firm surface.
- Allow a free space of at least 1¼″ above the player so as not to interfere with the cooling of the player.

In an audio rack
- The player can be placed in any desired position.

Stacked
- Place the player preferably at the bottom or at the top.
- Never position the player directly on top of a high-power amplifier, as such an amplifier gives off a substantial amount of heat.

Important!
Never allow the player to stand for long periods in direct sunlight or near a heat source.

CONNECTIONS *(Fig. 4)*
a Socket for the power cord
b **DIGITAL OUTPUT COAX:** for digital signal processing or future applications such as CD-I. This output supplies a digital signal and can therefore only be connected to an input which is suitable for this signal. This cord will use one cinch plug on either end.

Important!
Never connect this jack to a non-digital input of an amplifier, such as AUX, CD, TAPE, PHONO, etc. This can damage the amplifier and the speakers.

c **REMOTE CONTROL OUT IN:** for a remote control system. Use these jacks for connecting up the equipment when you are incorporating the player in a PHILIPS HiFi system with compatible RC5 remote jacks and its own remote control system.
d **DIGITAL OUTPUT OPTICAL:** this output supplies a digital signal via an optical path; for this reason it can only be connected to a Digital Analog Converter, an amplifier with an optical digital input or a digital sound processor. For this use the optical cord supplied.
This output is covered with a little cap which should only be removed when the output is in use.
e **ANALOGUE OUTPUT FIXED:** for connection to the amplifier.
- Insert a red plug into the 'R' jack (right channel) and the other plug into the 'L' jack (left channel).
- Insert the two other plugs into the corresponding jacks of the CD or AUX input of your amplifier.
You can also use the TUNER or TAPE IN connection, but *never* the PHONO input. This is not suitable for Compact Disc reproduction.
f **VOLTAGE SELECTOR:** see 'Checking the power supply'.
g **FUSE HOLDER:** see 'Replacing the fuse'.

OPERATION

EXPLANATION OF BUTTON ETC. *(Fig. 5)*

1 ON/OFF
> For switching on and off.

2 Disc tray on which the **OPEN** button is located; the tray closes when the front is pressed briefly.

3 DISPLAY
> Informs you about the functioning of the player.
> Displays details from the disc's track list.
  See also: 'The indications on the display'.

4 C(LEAR)
> For erasing track numbers from a program.
> For erasing 'names' and Favorite Track Selections from the FTS memory.

5 Digit/alphabet buttons
> For selecting another track during play.
> For selecting a track number to start play with.
> For selecting track numbers when compiling a program.
> For entering the recording time when making a tape recording.
> For naming discs and track numbers.

6 S(TORE)
> For storing track numbers in a program.
> For storing a program in the FTS memory.
> For storing 'names' in the FTS memory.
> For storing personal presets.

7 FTS
  '1' and '2'
> For activating the Favorite Track Selection circuit.
  INFO
> For checking the FTS memory.

8 TITLE
> For naming discs and track numbers.
> For calling up a 'name' you have entered.

9 STOP/CM
> For stopping play (STOP).
> For erasing a program (CM = Clear Memory).

10 PREVIOUS and NEXT
> For selecting another track during play.
> For selecting a track number to start play.
> For selecting track numbers when compiling a program.
  (PREVIOUS from high to low and NEXT from low to high.)

11 PLAY/REPLAY
> For starting play (PLAY).
> For returning to the beginning of a track (REPLAY).

12 DIGITAL OUT
> For switching the DIGITAL OUT output on and off.
  Only use this button if you connect the player to other digital equipment via the DIGITAL OUT output.
  When the DIGITAL OUT output has been switched on, the red indicator to the left of the button lights up.

13 PRESETS
> Selection of the PRESETS mode for entering and storing personal preferred settings.

14 'A-B'
> For setting the starting and stopping point of a passage to be repeated.

15 REPEAT
> For repeating a disc or a program.

16 TIME
> For selecting the time information you want to see:
-- **TRACK TIME**: the elapsed playing time of the track being played.
-- **REM TRACK TIME**: the remaining playing time of the track being played.
-- **TOTAL REM TIME**: the remaining playing time of a disc or a program.

17 DIM
> For adjusting the brightness of the display.

18 EDIT
> For selecting EDIT mode to enter the recording time when making a tape recording.

19 REVIEW
> For checking a program.

20 ◁◁ CURSOR and CURSOR ▷▷
> For fast search to a particular passage during play
  (◁◁ CURSOR backwards and CURSOR ▷▷ forwards).
  When used in conjunction with **FAST**, the search speed is increased.
> For moving the cursor on the display when naming a disc or track number.

21 PROG(RAM)/PLAY
> For direct programming (PROGRAM) or immediate selection and playback (PLAY) of track numbers.

22 IR REMOTE
> Receives the signals from the remote control.

23 SCAN
> For automatically playing the beginning of each track.

24 PHONES
> For connection of headphones.
  See also: 'Listening with headphones'.

25 RANDOM
> For playing in random order.

26 VOL(UME)
> For adjusting the volume when listening with headphones.

27 PAUSE
> For interrupting play.
> For holding play at the start of a disc, track or passage.

REMOTE CONTROL

The following buttons have a different label on the remote control:
- PROG(RAM) PLAY = DIRECT PR(OGRAM)/PLAY
- STOP/CM = STOP
- PLAY/REPLAY = PLAY
- PREVIOUS = ◁ TRACK
- NEXT = TRACK ▷
- ◁◁ CURSOR = ◁ SEARCH
- CURSOR ▷▷ = SEARCH ▷
- 'A-B' = 'A/B'

The remote control also has the following extra buttons:
OPEN/CLOSE
> For opening and closing the disc tray.
◁ INDEX ▷
- For selecting another index number during play.
- For selecting an index number to start play with.
  (◁ from high to low and ▷ from low to high.)

For the best reception of the signals from the remote control you should aim it as directly as possible at the IR REMOTE eye.
The eye lights up when it receives a signal from the remote control.

THE INDICATIONS ON THE DISPLAY (*Fig. 6*)
Each Compact Disc has, along with the music, a list detailing the numbers of the tracks, the playing time of each track and the total playing time of the disc. The player always scans this first and stores it in its memory in order to provide information via the display.

PLAY
> Lights up above **DIRECT** when the player is put in the direct play mode.

PROGR
> Lights up under **DIRECT** when the player is put in the direct programming mode.

TRACK
Under this indication you will see:
> What track is being played.
> The number of tracks on the disc after it has stopped.
> The number of tracks in a program.

TRACK TIME
Under this indication you will see:
> The elapsed playing time of the track being played.
> The total playing time of a disc or program.

REM TRACK TIME
> Indicates the remaining playing time of the track being played.

TOTAL REM TIME
> Indicates the remaining playing time of a disc or program.

MODE
Indicates the following functions:
– FTS MEMO 1 or FTS MEMO 2
> Flashes after FTS 1 or FTS 2 has been pressed.
> Lights up when a program from the FTS memory is played.
– TITLE
> Lights up after the TITLE button has been pressed.
– RANDOM
> Lights up when the tracks on the disc are played in random order.
– REPEAT
> Lights up when you repeat a disc or program.
– REPEAT A-B
> Lights up when a passage is repeated.

'1-20' track number indicator
> Shows the number of tracks on the disc after the track list has been scanned.

'+20'
> Lights up when there are more than 20 tracks on a disc.

READING
> Lights up when you switch the player on and when the disc's track list is being scanned.

8 CM DISC
> Lights up when a 8-cm disc is loaded.

12 CM DISC
> Lights up when a 12-cm disc is loaded.

PLAY
> Lights up while a disc is playing.

GO INTO STOP
> Lights up if you try to activate a function for which you must first stop play.

GO INTO PLAY
> Lights up if you try to activate a function for which you must first start play.

ERROR
> Lights up if you make a mistake when operating the player.

PLAYING THE ENTIRE DISC (PLAY/REPLAY)
● Press ON/OFF to switch the player on.
> *READING* lights up, followed by *INSERT DISC*.
● Press OPEN or OPEN/CLOSE (on the remote control) to open the disc tray.
> *TRAY OPEN* lights up, followed by *INSERT DISC*.
● Load a disc into the tray with the printed side *facing upwards (Fig. 7-9)* and close the tray.
> *TRAY CLOSE* lights up, followed by *READING*.
> *PLAY* lights up and playback starts.
You can also press PLAY/REPLAY immediately after inserting the disc; the tray then closes automatically.
> The number indicator shows how many tracks are on the disc. When a track has been played its number disappears.
> Under TRACK is always shown what track is being played.
> Under TRACK TIME the elapsed playing time of the track being played is always shown.
> After the last track play stops.
> *8 CM DISC* or *12 CM DISC* lights up, followed by *DISC READY*.
> The display shows the number of tracks and the playing time of the disc.

ADJUSTING THE BRIGHTNESS OF THE DISPLAY (DIM)
● Hold DIM pressed down.
> *BRIGHTNESS* lights up.
> The brightness of the display will now decrease gradually from the set (maximum) level.
> The successive steps are shown on the display (from '8' to '1').
● Release the button as soon as the required brightness level is obtained.
● Press DIM again.
> The brightness will now increase up to the maximum level ('8'). The brightness set using DIM is cancelled again if the player is switched off.

CALLING UP OTHER TIME INFORMATION (TIME)
● Press TIME whenever you want to know the remaining playing time of a track.
> REM TRACK TIME lights up.
● Press TIME again if you wish to know the remaining playing time of the entire disc.
> TOTAL REM TIME lights up.
● Press TIME again if you wish to return to the elapsed playing time indication.
> TRACK TIME lights up again.

GOING BACK TO THE BEGINNING OF A TRACK
(PLAY/REPLAY)
● Press PLAY/REPLAY.
> The track starts again from the beginning.

SELECTING ANOTHER TRACK DURING PLAY
('1-0', NEXT or PREVIOUS)
- Put the player in the direct play mode using PROGRAM/PLAY.
-) PLAY lights up above DIRECT.
- Key in the desired number (numbers consisting of two figures must be keyed in *within 2 seconds*) or press NEXT or PREVIOUS until the number appears under TRACK.
-) The music stops and a moment later the selected track begins to play.

DISC END will light up if you press NEXT while playing the last track.
DISC BEGIN will light up if you press PREVIOUS while playing the first track.
WRONG TRACK will light up if you select a non-existent number with the '1-0' digit buttons.

SELECTING ANOTHER INDEX NUMBER DURING PLAY
(◁ INDEX ▷)

Important!
Index numbers are not indicated specifically on the display. If the parts of a track have index numbers, this will be specified in the track list in the disc holder.

- Press INDEX ▷ or ◁ INDEX until the required index number appears under INDEX.
-) The music stops and a moment later the selected index number begins to play.

If the index number selected does not exist, play will start again at the beginning of the current index number.

SEARCHING FOR A PARTICULAR PASSAGE DURING PLAY
(◁◁ CURSOR and CURSOR ▷▷)
- Hold ◁◁ CURSOR down to search backwards to the beginning.
- Hold CURSOR ▷▷ down to search forwards to the end.

As soon as the button is released play restarts at once. As soon as you reach the beginning of the first track, a *'P'* appears on the display; then, following a two-second pause, *DISC BEGIN* lights up and play will resume there as soon as you release the button. If you reach the end of the last track, *DISC END* will light up. If you then release the button, play will resume a few seconds before the end of the disc.
At this search speed sound is audible.

FAST SEARCH FOR A PASSAGE
(FAST and ◁◁ CURSOR or CURSOR ▷▷)
- Press FAST.
-) *FAST* lights up.
- Now press ◁◁ CURSOR or CURSOR ▷▷ *within 2 seconds*.
- Hold the button down; if you release the button briefly, searching will resume at the lowest speed.

At this search speed no sound is audible.

SCANNING A DISC (SCAN)
- Press SCAN before or during play.
-) *SCANNING* lights up.
-) If the tray was open, it will now close.
-) The first 20 seconds of each track are played in turn.
- When the player reaches a track which you wish to hear in full, press PLAY/REPLAY.
- Press SCAN again to end the scanning.
-) *SCANNING* then goes out and play continues as normal.

During scanning the digit buttons '1-0', NEXT and PREVIOUS can be used.

If you only wish to hear the first 10 seconds:
- Press FAST and then SCAN.
-) *FAST SCAN* lights up.
-) The first 10 seconds of each track are played in turn.
- When the player reaches a track which you wish to hear in full, press PLAY/REPLAY.
- Press SCAN again to end the scanning.
-) *FAST SCAN* then goes out and play continues as normal.

BEGINNING WITH A PARTICULAR TRACK NUMBER

With the digit buttons '1-0'
- Put the player in the direct play mode using PROGRAM/PLAY.
-) PLAY lights up above DIRECT.
- Key in the required number (numbers consisting of two figures must be keyed in *within 2 seconds*).
-) The number appears under TRACK.
-) On the number indicator the selected track number and those following it light up.
-) *PLAY* lights up and play starts from the selected track.

WRONG TRACK lights up if you select a non-existent number.

With NEXT or PREVIOUS
- Press NEXT or PREVIOUS until the required number appears under TRACK. If you wish to begin with the highest number, you must still press PREVIOUS once.
- Press PLAY/REPLAY *within 7 seconds*.
-) On the number indicator the selected track number and those following it light up.
-) *PLAY* lights up and play starts from the selected track.

BEGINNING WITH A PARTICULAR INDEX NUMBER
(◁ INDEX ▷ and PLAY/REPLAY)

Important!
Before selecting an index number you must first select a track number. If you select the track number with the digit buttons '1-0', then no more than *2 seconds* may elapse between the pressing of the different buttons. If you select the track number with NEXT or PREVIOUS, then no more than *7 seconds* may elapse between the pressing of the different buttons.

- Select the track number you wish to start with.
-) Then press INDEX ▷ or ◁ INDEX until the desired index number appears on the display.
- Press PLAY/REPLAY.
-) *PLAY* lights up and play starts from the selected index number.

If you select a non-existent index number, playback starts with the selected track.

PLAYING THE DISC IN RANDOM ORDER (RANDOM)
- Before or during play press RANDOM.
-) The RANDOM indication lights up.
-) If the tray was open, it will now close.
-) All the tracks on the disc are now played in a sequence to be determined by the player.
-) Press RANDOM again if you wish to return to normal play.

If during play you press PREVIOUS you will return to a track which has already been played. If you press NEXT you are selecting any one of the following tracks. If you press PREVIOUS during the first track or NEXT during the last track, *ERROR* will light up.
By pressing REPEAT you can repeat random-order play. The player then always begins with the same track, but otherwise changes the sequence every time the disc is repeated.
The digit buttons '1-0' cannot be used during random-order play.

5

BRIEFLY INTERRUPTING PLAYBACK/HOLDING PLAY AT THE START OF A DISC, TRACK OR PASSAGE (PAUSE)

To briefly interrupt playback
● Press PAUSE.
) The *PAUSE* indication lights up.
) The sound stops but the disc continues to spin.
● Press PAUSE again to restart.
) The *PAUSE* indication now goes out.
) Play restarts at the point where it was interrupted.

Holding play at the start of a disc, track or passage
You can go to any place on the disc and hold it by pressing PAUSE before:
– starting to play the disc;
– going back to the beginning of a track;
– selecting another track or index number ;
– searching for a particular passage;
– beginning with a particular track or index number;
– playing the disc in random order.
Press PAUSE again to start play at the chosen place.

REPEATING A PASSAGE ('A-B')
● During play press 'A-B' at the required starting point.
) The REPEAT A indication lights up, while 'B' flashes.
● Press 'A-B' again at the required stopping point.
) The 'B' indication now lights up continuously.
) The passage between points A and B will now be replayed continuously.   .
● Press 'A-B' again to stop repeat.
) The REPEAT A-B indication goes out and play continues as normal.
To find the starting and stopping points quickly, you can use the CURSOR ▷▷ button.
The repeating of a passage can also be stopped by pressing STOP/CM, OPEN or OPEN/CLOSE.

REPEATING THE DISC (REPEAT)
● Press REPEAT before or during playback.
) The REPEAT indication lights up.
) The disc will now be repeated continuously.
● Press REPEAT again to stop repeating.
) The REPEAT indication goes out.
) The disc will play on to the end and then stop.
Repeating can also be stopped by pressing STOP/CM, OPEN or OPEN/CLOSE.

STOPPING PLAYBACK
(STOP/CM, OPEN or OPEN/CLOSE)
● Press STOP/CM if you merely wish to stop.
) The *PLAY* indication goes out, the indication *8 CM DISC* or *12 CM DISC* lights up, followed a few moments later by *DISC READY*.
) The display shows the number of tracks and the total playing time of the disc.
● Press OPEN or OPEN/CLOSE if you wish to stop and take out the disc.
) *TRAY OPEN* lights up, followed a few moments later by *INSERT DISC*.

PROGRAMMING

By programming the player you can play up to 30 tracks of a disc in any required sequence. If you exceed the maximum of 30 tracks, *ERROR* lights up. Index numbers cannot be stored.

STORING A PROGRAM

Before play
● Press PROGRAM/PLAY.
) PROGR lights up under DIRECT; the player is now in the direct programming mode. Every track number you now key in is directly included in the program.
● Key in the first number you wish to program.
) The number appears under TRACK.
) The number lights up on the number indicator; it has now been stored.
● Store each of the remaining track numbers required in the same way.
) Every time you store a track number, you will see the number of tracks under TRACK and the playing time of your program under TRACK TIME. If the program is longer than 99 minutes and 59 seconds, then '– – : – –' lights up. The number indicator always shows what numbers have been stored.

During play
● Put the player in the direct programming mode using PROGRAM/PLAY.
) PROGR lights up under DIRECT.
) Every track number which you now key in is directly included in the program.
) The number indicator always shows what numbers have been stored.

Note!
As soon as you have entered the first number, *PROGRAM PLAY* lights up and play continues with the programmed track numbers.

STORING TRACK NUMBERS USING SCAN
● Press SCAN before or during play.
) *SCANNING* lights up.
) If the tray is open, it will now close.
) The first 20 seconds of each track are played in turn.
● Press STORE at each track you wish to include in the program.
) The number appears on the track number indicator; it has now been stored.
) The player immediately starts to play the first 20 seconds of the next track.
Here too, you can first press FAST if you only want to hear the first 10 seconds of each track.

CHECKING THE PROGRAM
● Press REVIEW.
) The *PROG REVIEW* indication lights up.
) All the numbers appear in the programmed sequence under TRACK.
If *NO PROGRAM* lights up, this means that no track numbers have yet been stored.
You can check a program prior to, during or after programmed play.

ERASING A TRACK NUMBER FROM THE PROGRAM OR THE ENTIRE PROGRAM
● Press REVIEW before or after programmed play.
) The *PROG REVIEW* indication lights up.
) All the numbers appear in the programmed sequence under TRACK.
● Press CLEAR as soon as the number you wish to erase appears.
) The number disappears from the number indicator.
● Press STOP/CM if you wish to erase the entire program.

PLAYING THE PROGRAM

● Press PLAY/REPLAY.
〉 *PROGRAM PLAY* lights up and playback starts with the first number of the program.

All buttons can be used during programmed play. Search for a particular passage is only possible within the track being played. As soon as you reach the beginning of the track, *BEGIN OF NR* lights up; when you reach the end the track, *END OF NR* lights up. As long as the player is in the direct programming mode you can continue to add to the program during playback. When STOP/CM is pressed or when the program has been played, the disc stops, but the program remains stored. The program will be erased when you open the tray or if you press STOP/CM twice in succession *during playback*.

FAVORITE TRACK SELECTIONS (FTS)

For each disc you can store two programs in the player's permanent (FTS) memory.
Your Favorite Track Selections of a given disc can then be called up and played whenever you wish.
The selections will remain stored in the FTS memory even if you play the entire disc or compile a different program from it.
The number of discs which can be stored in the FTS memory depends on the number of tracks in each program.

STORING A FAVORITE TRACK SELECTION

● Compile your program as described in the PROGRAMMING section.
● Press FTS 1.
〉 FTS MEMO 1 starts flashing.
● Press STORE.
〉 *STORED* lights up, followed by the ranking number of this program.
〉 The selection is now stored in the FTS 1 memory under this ranking number.

If you wish to store a further selection from the same disc:
● Press STOP/CM. (If you have stored the first program during playback you must press STOP/CM twice.)
● Compile your program as described in the PROGRAMMING section.
● Press FTS 2.
〉 FTS MEMO 2 starts flashing.
● Press STORE.
〉 *STORED* lights up, followed by the ranking number of this program.
〉 The selection is now stored in the FTS 2 memory under this ranking number.

Note!
– If a selection of a particular disc had already been stored, then it is automatically erased and the new selection is stored under the old ranking number.
– If *NO SPACE* appears after you have pressed STORE, then the FTS memory is full: you must erase one or more old FTS programs to make room to store the new program.
– If *NO PROGRAM* appears after you have pressed STORE, then no program has been compiled first.

FTS PROGRAMMED PLAY

● Press FTS 1 or FTS 2.
〉 FTS MEMO 1 or FTS MEMO 2 starts flashing.
● Press PLAY/REPLAY.
〉 FTS MEMO 1 or FTS MEMO 2 now lights up continuously.
〉 *PROGRAM PLAY* lights up and the chosen selection will now be played.
If *NOT IN FTS 1*, *NOT IN FTS 2* or *NO FTS FOUND* appears, no favorite selection has been stored.
● Press STOP/CM twice if you wish to revert to normal play.

All buttons can be used while a favorite selection is being played. Search for a passage is only possible in the track which is being played. As soon as you reach the beginning of the track, *BEGIN OF NR* lights up; when you reach the end the track, *END OF NR* lights up.
As long as the player is in the direct programming mode you can continue to add to the program during playback.

CHECKING THE FTS MEMORY

● Press INFO.
〉 *FTS INFO* lights up.
〉 The following information appears on the display in this order:
– The number of discs in the FTS 1 and FTS 2 memory. For example: *'FTS1 04 DISC'* and *'FTS2 05 DISC'*.
If the FTS memory is empty, then you will see *'FTS 1 EMPTY'* and/or *'FTS 2 EMPTY'*.
– The number of spaces available in the memory. For example: *'112 SPACE'*.
– The number of times that the discs in the FTS 1 and FTS 2 memory have been played: *FTS1 INFO*, followed by, for example, *'NR 01 03 PL'*, *'NR 02 05 PL'*, etc.
FTS2 INFO, followed by, for example, *'NR 01 04 PL'*, *'NR 02 06 PL'*, etc.
– Then *TITLE MEMORY* appears. You are now given information on the 'names' which you have given to discs and/or track numbers. For this refer to 'NAMING DISCS AND TRACK NUMBERS' under 'OTHER POSSIBILITIES'.
With NEXT you can proceed more rapidly to the next block of information.

ERASING A FAVORITE TRACK SELECTION

● Press INFO.
〉 *FTS INFO* lights up.
● Press NEXT until the ranking number appears on the display; for example *'NR 02 01 PL'*.
● Hold CLEAR pressed down until *DELETED* lights up.
〉 The selection has now been erased.

If you do not know the ranking number:
● Load the disc and close the tray.
● Press FTS 1 or FTS 2.
〉 FTS MEMO 1 or FTS MEMO 2 starts flashing.
● Hold CLEAR pressed down until *DELETED* lights up.
〉 The selection has now been erased.

ERASING THE ENTIRE FTS MEMORY

● Press FTS 1.
〉 FTS MEMO 1 starts flashing.
● Hold CLEAR and REPEAT pressed down.
〉 *CLEARING ALL* lights up, followed a few moments later by *ALL CLEARED*.
〉 The entire FTS memory has now been erased.

OTHER POSSIBILITIES

LISTENING WITH HEADPHONES (PHONES)
- Connect headphones with a 6.3 mm jack plug and an impedance between 8 and 2000 ohms to the PHONES jack.
- The sound level is adjusted with the VOLUME control.

PERSONAL PRESETS

Important!
- When setting allow no more than *7 seconds* to elapse between pressing the various buttons, otherwise *DISC READY* will light up again and the display will again show the number of tracks and the playing time of the disc.
- As soon as you press STORE, the next function to be set will automatically appear on the display. You must therefore store the functions in the order in which they appear on the display.
- The settings will remain stored in the player's memory, even if you switch it off.
- You can set the following in this order:

The brightness of the display
- Press PRESETS.
-) *PP* (= Personal Presets) lights up with above it *BRIGHTNESS*; after this you will see the level at which brightness has been set.
- Press ◁◁ CURSOR or CURSOR ▷▷ until you obtain the desired brightness.
- Press STORE.
-) The brightness has now been set.

The play mode (AUTO)
Depending on what play mode you select, after switching on the player or closing the tray by hand, play will automatically begin with:
- the whole disc (AUTO-PLAY);
- the FTS 1 program of the disc (AUTO-FTS 1);
- the FTS 2 program of the disc (AUTO-FTS 2) or
- the tracks of the disc in a random order (AUTO-RANDOM).

If you select AUTO-STOP, then you must start play yourself with PLAY/REPLAY, RANDOM or SCAN.
-) *AUTO-STOP* lights up above *'PP'*
- Press ◁◁ CURSOR or CURSOR ▷▷ until the required play mode appears on the display.
- Press STORE.
-) The play mode has now been set.

NAMING DISCS AND TRACK NUMBERS (TITLE)
Using the digit/alphabet buttons you can give all discs and track numbers a 'name'.
A 'name' can consist of a maximum of 12 characters (letters, digits and/or symbols). Each button has marked on it what digit and what letters can be entered with it. With button '9' you can enter a space (__). With button '0' you can enter the symbols /, +, <, ¬, >, _ and *.

Naming a disc
- Press TITLE.
-) TITLE lights up.
-) '0' appears under TRACK.
-) The cursor begins to flash on the display.
- You can now enter the required 'name'; after each character that you key in press CURSOR ▷▷ to pass on to the next position on the display (with ◁◁ CURSOR you return to the previous position).
- Press STORE as soon as you have entered the complete 'name'.
-) The 'name' disappears and *STORED* lights up.
-) The 'name' appears again. The first character flashes; you can still change the 'name' if you wish.
- Press TITLE if there is nothing you wish to change.
-) The 'name' has now been stored in the permanent (FTS) memory of the player.

Naming a track number
- Press TITLE.
-) TITLE lights up.
-) '0' appears under TRACK.
- Select the required number with NEXT or PREVIOUS.
-) The number appears under TRACK.
- Now enter the 'name' and store it using STORE.

Track numbers can still be named even if a 'name' has already been stored for the entire disc.

Note!
If *NO SPACE* lights up after you have pressed STORE, then the memory is full: you will have to erase one or more 'names' to make space for the new one.

CHANGING A 'NAME'
- Press TITLE.
-) The 'name' appears on the display; the first character flashes.
- Enter the new 'name' and store it again using STORE.

CHECKING THE TITLE MEMORY
- Press INFO.
-) *FTS INFO* lights up.
- Press NEXT until *TITLE MEMORY* appears on the display.
-) You will now receive the information on the 'names' entered. You will see in succession: *TITLE NR 1* followed by the 'name', *TITLE NR 2* followed by the 'name' etc.
  If no names have been stored in the FTS memory, then *NO TITLE* lights up.

With NEXT you can proceed more rapidly to the next block of information.

ERASING A 'NAME'
- Press INFO.
-) *FTS INFO* lights up.
- Press NEXT until **the number** of the name appears on the display; for example *TITLE NR 02.*
- Hold CLEAR pressed down until *DELETED* lights up.
-) The name has now been erased.

RECORDING FROM YOUR COMPACT DISC PLAYER (EDIT)

If you wish to make a tape recording of a disc or a program, it can be useful to store the recording time of the tape in the player's memory.
Should the disc or the program be longer than one side of the tape, a pause will then be inserted automatically after the last track which fits onto that side. This will prevent the disc or the program continuing to play when the tape has already stopped.

- Press EDIT.
- 〉 *CASSETTE* lights up with beneath it *'C 0 0 0'*.
- Press NEXT or PREVIOUS until the required recording time appears on the display (you will see successively: 'C 30', 'C 45', 'C 60', 'C 90' and 'C 120') or key in the recording time of the tape using the '1-0' digit buttons. For a 60-minute tape you should key in '060'.
- 〉 The recording time is now stored in the player's memory; you can now record the disc or the program.
- Press PLAY/REPLAY.
- 〉 *CASSETTE SIDE A* lights up, followed by *PLAY* or *PROGRAM PLAY*. The track number indicator shows which tracks can be recorded on side A of the tape; these numbers will be played one after the other.
- 〉 Play will stop after the last track.
- 〉 *CASSETTE SIDE B* lights up and the track number indicator shows which tracks can be recorded on side B of the tape.
- Press PAUSE.
- 〉 The track numbers shown on the number indicator are played in that order.

Note!
- You can also start playback with RANDOM; the numbers will then be recorded in a different order than on the disc or in the program.
- As soon as you press PLAY/REPLAY or RANDOM, the other player functions (except TIME and DIM) will temporarily be switched off to prevent the recording being interfered with. *EDIT ACTIVE* lights up if you press one of the other buttons during playback.

ADDITIONAL INFORMATION

CARE OF THE DISCS

Although both sides of a disc are protected by a special coating, it is still advisable to treat the discs with care:
- Never leave discs lying around, put them back in their holders immediately after use.
- Never write on the printed side!
- Do not attach any stickers on the disc.
- Keep the shiny surface of the disc clean. Use a soft lint-free cloth and always wipe the disc in a straight line from center to edge. You may breath lightly on the disc first.

The cleaning set SBC 3540 A01, available separately, is a useful accessory for cleaning your discs. It contains a protective support, a special disc cleaning cloth and a bottle of cleaning fluid.

If your local dealer does not carry the accessory, it may be ordered direct from Philips Consumer Electronics Company.

Call Toll Free: 1-800-255-5122
In Tennessee, Call: 1-800-824-2567

Or write:
> Philips Consumer Electronics Company
> Accessories Marketing Department
> P.O. Box 1597
> Greeneville, TN 37744-9983

Important! - Cleaning agents for conventional records are not suitable for cleaning a Compact Disc. Nor may detergents or abrasive cleaning agents be used.

PLAYER MAINTENANCE

A chamois leather slightly moistened with water is sufficient for cleaning the player. Do not use cleaning agents containing alcohol, spirits, ammonia or abrasives.
The disc tray should be kept free of dust with a dry cloth.

TECHNICAL DATA

Typical Audio Performance
Frequency range: 2-20,000 Hz
Amplitude linearity: 0.035 dB (20-20,000 Hz)
Phase linearity: 0.2° (20-20,000 Hz)
Dynamic range: 97 dB
Signal-to-noise ratio: 100 dB (20-20,000 Hz, A weighted)
Channel separation: 100 dB (1 kHz)
Total harmonic distortion: 0.002% (1 kHz)
Wow and flutter: quartz crystal precision
D/A conversion: Bitstream conversion (256 x oversampling, 1 bit), in differential mode
Audio output level: 2 V_{rms}
Impedance PHONES jack: 8-1000 ohms

Power supply
Mains voltage and frequency: see the type plate on the rear of the player
Power consumption: 15 W approx.
Safety requirements: UL

Cabinet
Material/finish: metal and polystyrene with decorative trim
Dimensions (w x h x d):
16¹⁷⁄₃₂″ x 3⅜″ x 7⅞″ (420 x 90 x 280 mm)
Weight: 8.82 lbs (4 kg) approx.

Specifications are subject to change without notice

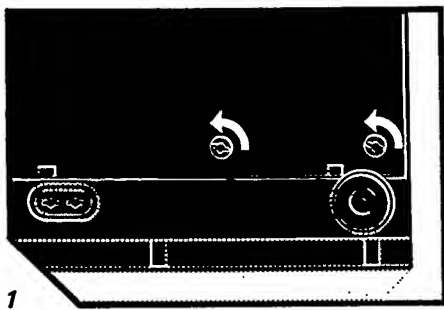## SYMPTOMS AND THEIR LIKELY CAUSES

Insufficient familiarity with the combination of a new product and new discs may lead to faults arising during use. These are generally caused by simple errors in operation or external factors. It is perhaps useful to check the points listed below and where possible remedy these before taking your player for repair.
- The transit clamps have not been removed.
- Condensation has formed on the lens of the laser due to a dramatic change in temperature. This will disappear automatically after some time.
- There is a foreign object in the disc tray.
- The disc has not been inserted with the printed side up or there is no disc in the tray.
- The disc is dirty, badly scratched or warped.
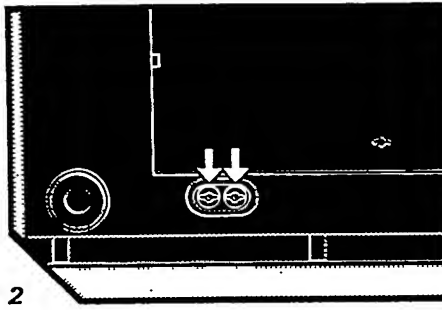- The player has been connected to the PHONO jack of the amplifier.

If the fault remains, try to clear it by switching the player off and on. If this also fails to help, do not continue experimenting, but remove the plug from the outlet and consult your dealer.
Certain faults may be caused by a disc. In order to help determine the precise cause, take the disc with which the fault occurred with you when you take the player for repair.
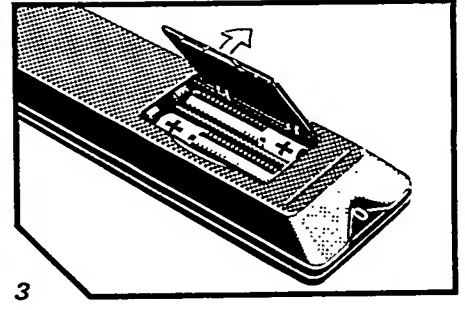*Under no circumstances should you repair the player yourself, as this will invalidate the guarantee!*
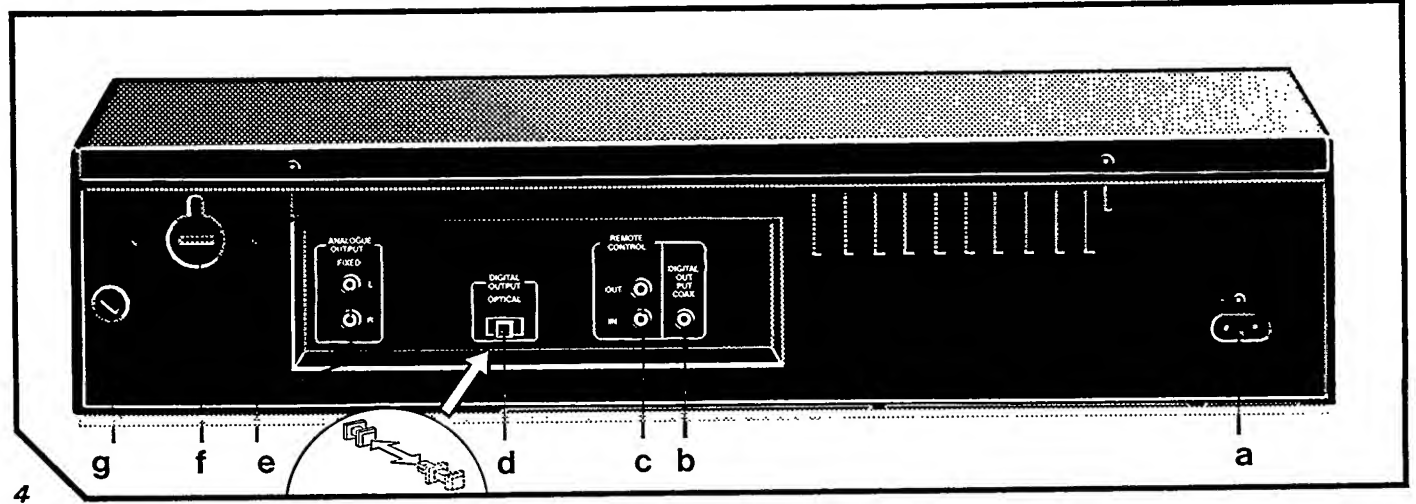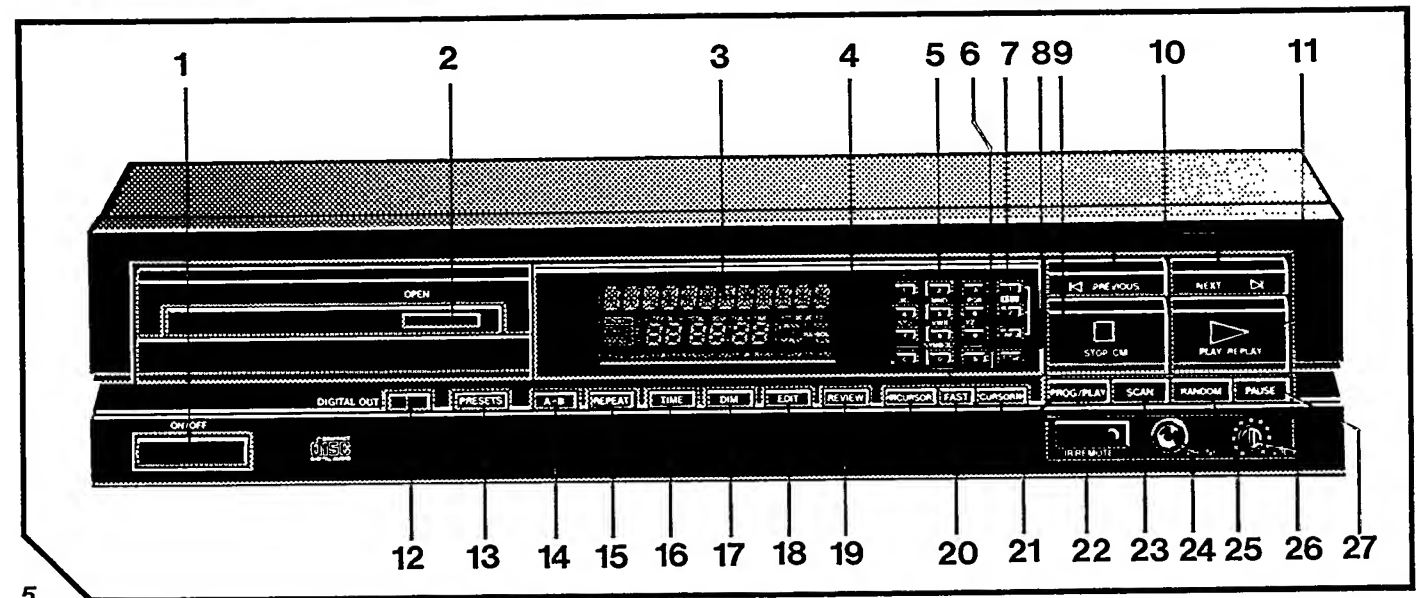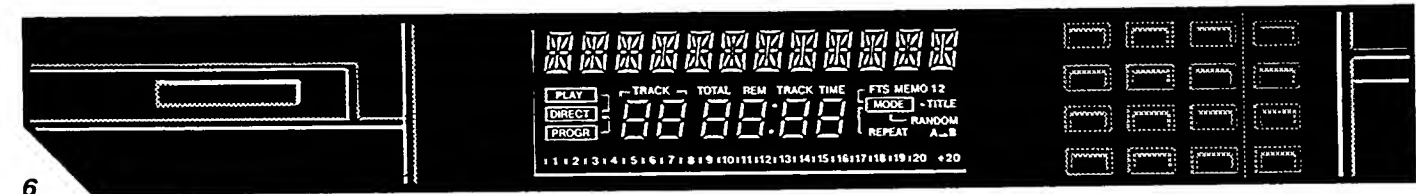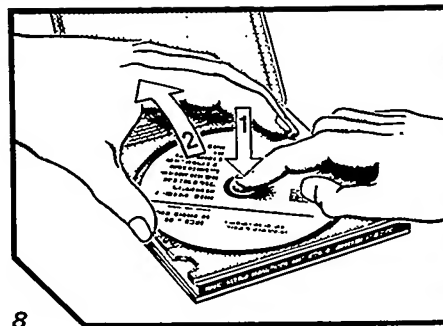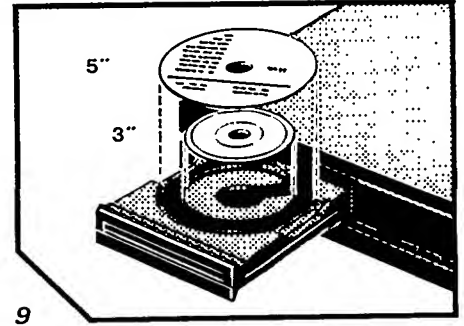
LIMITED WARRANTY

PHILIPS COMPACT DISC DIGITAL AUDIO PLAYER

- **Two (2) Year Carry-In Labor Warranty**
- **Three (3) Year Carry-in Service Parts Warranty**
- **Four (4) Year Laser Warranty**

* For purchases outside the U.S., see applicable warranty from country of purchase.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Parts and Labor During First 2 Years

For two (2) years from the date of purchase, an Authorized Service Center will replace any part found defective and will repair any product defect without charge to you for parts or labor.

Replacement Parts After 2 Years

If within three (3) years after the date of purchase, four (4) years on the laser, a part is found defective and needs to be replaced, an Authorized Service Center will supply to you a new or, at your option, rebuilt part without charge to you for the replacement part. After two years from the date of purchase, you must pay for all labor, transportation and service charges.

Replacement parts installed during the warranty period are warranted only for the balance of the original warranty period.

Who is Protected? ... Where?

This warranty is extended to the original retail purchaser for products purchased and used in the U.S.A., Puerto Rico and the Virgin Islands. If you move within these areas, an Authorized Service Center in your area will honor this warranty for the remainder of the original warranty period.

What the Purchaser Must Do

Before you call for service, check your operating instruction booklet. A slight adjustment of the customer controls discussed in your instruction booklet may save you a service call.

How to Get Warranty Service

To obtain Warranty Service, tou must deliver the Compact Disc Player to an Authorized Compact Disc Player Service Center for repair, together with evidence of the purchase date and description of the problem. You must arrange pick-up following repair.

Warranty Exclusions

Your Warranty Does Not Cover:

– Labor charges for player installation or set-up, adjustment of customer or preference controls.

– Product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics Company.

– A Compact Disc Player purchased, used or serviced outside the U.S.A., Puerto Rico and the Virgin Islands, or used for commercial or institutional purposes (included, but not limited to products used for rental purposes).

– Incidental or consequential damages resulting from the product. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to pre-recorded material (copyright or non-copyright).

ALL IMPLIED WARRANTIES INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THIS EXPRESS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Important Reminder

Please fill out and mail your Warranty Registration Card promptly. It will be easier for us to notify you if it should ever be required. The return of the Warranty Registration Card is not a condition to Warranty Coverage.

Philips Service Company
P.O. Box 55 - Jefferson City - Tennessee TN 37760
☎ (615) 475-0317

How To Get Service On Your Compact Disc Digital Audio Player Through Philips Factory Service

To obtain expedient IN or OUT-of-warranty repair:

1. Contact the nearest Philips Factory Service Center, listed to the right, to obtain the cost of out-of-warranty repair for your model product. *
2. Pack your Compact Disc Player in a suitable carton for safe shipment.
3. Mail the product to the nearest Factory Service Center along with a letter inside the carton describing the problem. Be sure that the letter includes your name, address and telephone number. Enclose your check or money order in the amount quoted you by the Factory Service Center.
4. When your product is received, it will be repaired in a manner that meets Philips' high quality standards and returned to you by prepaid transportation.

* IN or OUT-of-warranty service can also be obtained by delivering the Compact Disc Player to a Service Center in your area.

Philips Factory Service Centers

Atlanta - 1898 Leland Drive,
  Marietta, GA 30067 . . . . ☎ (404) 952-3279
Boston - 41 Second Avenue,
  Burlington, MA 01803 . . . . ☎ (617) 272-4825
Chicago - 500 East Touhy Avenue,
  Des Plaines, IL 60018 . . . . ☎ (708) 827-9405
Cleveland - 24090 Detroit Avenue - Rear,
  Westlake, OH 44145 . . . . ☎ (216) 899-2040
Connecticut - 77 Grassmere Avenue,
  West Hartford, CT 06110 . . . . ☎ (203) 233-5151
Dallas - 1413 Bradley Lane,
  Carrollton, TX 75007 . . . . ☎ (214) 323-8335
Los Angeles - 12889 Moore Street,
  Cerritos, CA 90701 . . . . ☎ (213) 637-7293
Miami - 2099 West Atlantic Boulevard,
  Pompano Beach, FL 33069 . . . . ☎ (305) 978-0467
New Jersey - 178 Manor Road,
  East Rutherford, NJ 07073 . . . . ☎ (201) 935-0600
New York - 116 Charlotte Avenue,
  Hicksville, NY 11801 . . . . ☎ (516) 933-1780
Philadelphia - 3599 Meadow Lane,
  Cornwell Heights, PA 19020 . . . . ☎ (215) 638-7500
Tennessee - 112 Polk Street,
  Greeneville, TN 37743 . . . . ☎ (615) 636-5802

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